

# AIDS -

**D**escribed by Dr Harry Sabin, developer of Sabin Oral polio vaccine, as "the micro-biologist who most probably knows more about retroviruses than any other," Professor Peter Duesberg is the experts' expert.

Discoverer of the cancer-causing 'oncogenes', Peter Duesberg is adamant that Dr Robert Gallo's little bug HIV (Human Immuno-deficiency retroVirus), the villain in the A.I.D.S. drama, **does not** cause AIDS. Ironically, Duesberg is the mentor of Gallo, co-discoverer with Luc Montagnier of the HIV retrovirus.

**"Inject some pure, uncontaminated HIV into my veins,"** says Duesberg, **"and I am confident I will not get AIDS."** - an incredible public challenge from a man with the credentials and personality of Professor Peter Duesberg!

The operative word here is **uncontaminated**. On the surface Duesberg's 'challenge' is the sort of media-grabbing stuff expected of cranks. Threatening such drastic action to prove your theory is 'unscientific', causing Duesberg's colleagues to brand his approach as dangerous. Yet none of these critics accused French researcher Dr Daniel Zagury of the same thing when he injected himself with a preliminary, untested AIDS vaccine in February 1986. He didn't get AIDS. - but AIDS is hard to catch.

However, Zagury only injected a substance designed to prevent AIDS - a somewhat pointless exercise unless you intend to expose yourself to the virus. Duesberg is not suggesting injecting a vaccine, but the **pure retrovirus HIV** - claimed as the cause of AIDS - a rare and courageous challenge which strikes at the objective heart of medical research. It calls the medical research establishment that Duesberg has taken issue with the conventional view of AIDS, not by presenting an alternative theory but with this 'challenge' to the standards of objectivity being applied.

He is saying to the world that medical 'research' cannot be trusted any more - that it has lost its way.

## Psychology of Research

None of this is addressing the physiological aspects of AIDS, dealing more with psychological dimensions which include the attitude of medical researchers. Duesberg's view, vindicated in Zagury's 'mad science' stunt, is that medical research is more interested in finding a 'cure' for AIDS than in being objective in interpreting the evidence.

*But isn't finding a cure what it's all about?*

Yes, but to find the cure means *knowing what causes the disease*. Duesberg is saying HIV does *not* cause AIDS and medical science's conviction that it does isn't based on objective proof, but on circumstantial evidence subjectively organised to derive 'readily curable' causes. Grants and fame are what researchers now pursue - the 'cure' is merely a means.

Duesberg is not the sort of scientist to do extreme things like conduct experiments on himself with potentially lethal viruses, if he thought they were only *probably* harmless. Remember,

# The Duesberg Challenge

Duesberg may know more about retroviruses - the class of virus that includes HIV - than anyone else, according to Sabin.

**"Most animal and all human retroviruses so far discovered (except HIV) are neither pathogenic nor carcinogenic,"** says Duesberg, **"and are usually only associated with benign disorders."**

This does not exclude HIV from being pathogenic or carcinogenic. Its clinical and epidemiological association with AIDS lends a high probability of it being the cause, even though no other retrovirus performs like HIV. Yet Peter Duesberg, pure scientist, fully aware of these circumstantial associations, is still prepared to take the risk and inject HIV into his veins.

*Or is he?*

Perhaps Duesberg's 'challenge' is not quite what it seems. It is at this point we return to the idea of **uncontaminated** HIV.

This is Duesberg's **one** condition. What he is prepared to inject is **uncontaminated** HIV; that is, HIV that has been completely isolated from the human body and is bio-chemically active in culture.

This holds the key to Duesberg's outrageous 'challenge'. He is confident that medical science will not be able to fully isolate HIV and provide an uncontaminated sample. In fact he is so confident it can't, he is prepared to stake his life on it!

It's a calculated gamble by a man who knows his 'field', *for if HIV can't be 'decontaminated' then there is a high probability it is not the primary cause of AIDS.*

The notion that a lethal killer has to be 'decontaminated' - made clean - is paradoxical. Yet microbiology demands such 'decontamination', as it is this isolation of a virus that determine whether or not it is the cause of a particular disorder.

Isolating HIV isn't easy. In fact, retroviruses are one of the most difficult micro-organisms to isolate from their ecology due to the fragility of their RNA genome (genetic code). So fragile, in fact, **that on contact with the atmosphere its genome dissolves in ten seconds, totally deactivating our 'lethal killer'.**

For this reason retroviruses are not normally found outside body fluids and up until the first human retrovirus was uncovered, were described as *endogenous* - that is, they are usually found attached as part of the genetic code of the organisms they are discovered in.

By the mid-seventies the endogenous category had more or less been abandoned and the tendency was to view all viral disorders as *exogenous* - that is, coming from a source other than the organism's own DNA. AIDS, being a contagious disease, slipped easily into the exogenous category.



## Cats with AIDS

Yet way back in the early sixties, a Glaswegian research team discovered that when FELV-1 (feline leukaemia virus) that had developed in cats with leukaemia (though not as the cause) was transmitted either sexually, orally or by some other exchange of body fluids, the recipient cats displayed immuno-suppression characteristic of the later human AIDS condition (cited by Gallo).

Before this transmission took place (and it should be noted that it took place accidentally) FELV-1 was categorised as endogenous. *It was known not to be the cause of the leukaemia, as this had come from human blood samples injected into the cats.* It was considered to be a benign micro-organism - "a laboratory curiosity" as Gallo described it - a 'side-effect' of the rearranged pathology of the cats.

After its accidental transmission had been discovered as the cause of the immune suppression, confusion broke out among researchers as to what category it should now be placed in.

As the cats were 'unrelated' - that is not of the same family - researchers defined the condition as **exogenous**. Its 'transmissibility' supported this view.

But when is a cat 'unrelated' to all cats? Some would say when it's a dog - in other words it only truly becomes 'unrelated' when it's no longer of the same species. The apparent 'unrelatedness' described by researchers reflects the 'nuclear' concept of relatedness in 1960s biology, rather than the 'extended family' view of relatedness science is approaching. In this 'extended' view, the 'disease' fills the criterion for an *endogenous* condition, ie that FELV-1 is an immune response by the cats to 'alien' blood - in this case, human.

What FELV-1 demonstrated back then has a profound effect on how we view human AIDS today. In FELV-1 we have an **endogenous** retrovirus with no apparent effects - exactly as Duesberg describes - occurring in one member of a species, that when transmitted to a member of the same species causes a much more dramatic effect similar to human AIDS.

In other words, it looks like a *body-specific* immune component released as a response to 'foreign' blood, which when trans-

mitted to any other member of that species can cause their immune system to become confused.

What it does to members of other species is another question.

In the mid-1970s a USSR research team was reported to have located an antibody in human faeces able to deal effectively with an almost unbelievable variety of disorders. It promised to be the ultimate antibody.

There were two problems they faced, however. One; the antibody was incredibly difficult to isolate and hold in suspension in culture. Two; it was *body-specific* - only effective as an antibody in that person, displaying no effect in any other individual.

More recent AIDS research from the USA has revealed that massive accumulations of HIV have been found in the macrophage lymph tissues where T4 and T8 immune cells pick up their instructions. Research indicates that 12%-58% of macrophages from AIDS patients are infected with HIV. Studies show that HIV-infected macrophage makes a substance that prevents T4 cells from proliferating. The T4 cell provides HIV with its incubator - without these cells it can't reproduce! If HIV is 'infecting' this macrophage lymph tissue, why would it instruct it to stop producing what it needs to reproduce itself?

Is HIV something else again? As Duesberg points out, where there are antibodies present with a disease the body is successfully combating it. While those anti-bodies are present the disease isn't likely to be fatal unless it is generating a high mortality rate among the cells it infects. HIV is detected via its antibodies - a fact calling into question HIV's 'killer' image, which is further limited by the fact that the mortality rate of T4 cells in AIDS cases is between 10,000 to one and 100,000 to one, a very low rate, 5000 times slower than the minimal cell mortality required to cause death!

This is not the pathology of a 'killer disease which destroys the immune system'!

So what is HIV?

Researchers induced leukaemia in cats, from which a retrovirus, FELV-1, appeared as a harmless 'side-effect' while it remained in the parent organism. But when transmitted to similar organisms it causes havoc in their immune systems. Why the immune system? Do these retroviruses have an affinity with it? If they are part of the parent organism's immune system, it's likely that in similar organisms they will tend to migrate to the immune system.

HIV does funny things. Sometimes it kills T-cells; sometimes it helps them grow. Sometimes it blows holes in them; sometimes it merely confuses them, or does nothing at all. Its inconsistency is confusing, just as if it were confused!

Professor Duesberg says HIV is not the cause of AIDS, and if anyone's opinion on retroviruses is worth considering, his is.

If HIV is not the cause of AIDS, yet is almost constantly present with AIDS, then it is associated with AIDS in much the same way that antibodies are associated with disease - so intrinsically that HIV is detected via 'anti-bodies' to it.

Wherever a disease goes, its antibody is never far away. And wherever AIDS is found HIV is never far behind! HIV may not be the cause of AIDS - but could be a reaction to it ☆

John Sword

### Further Reading

*Scientific American* December 1986, Sept. 1987  
*New Scientist*, March 3rd, April 28th, May 5 1988  
*Discovery*, June 1988